

CTIA Presentation on Mobile Wireless Broadband Competition

CTIA – The Wireless Association®

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Wireless Industry Facts

- Over 238 million subscribers, and constantly growing.
- 1.8 trillion minutes of use in the United States in 2006, 714 minutes of use per customer per month.
- The average monthly wireless bill has fallen more than 95% since 1992. The average effective revenue per minute has fallen 84% since 1993.
- The U.S. wireless industry remains highly competitive with multiple facilities-based providers in every market. There are over 160 licensees currently providing wireless service. The AWS and 700 MHz auctions will only increase that competition.
- U.S. mobile wireless industry is deploying mobile broadband services that compete with the cable modem and DSL providers.

Mobile Wireless Broadband Benefits

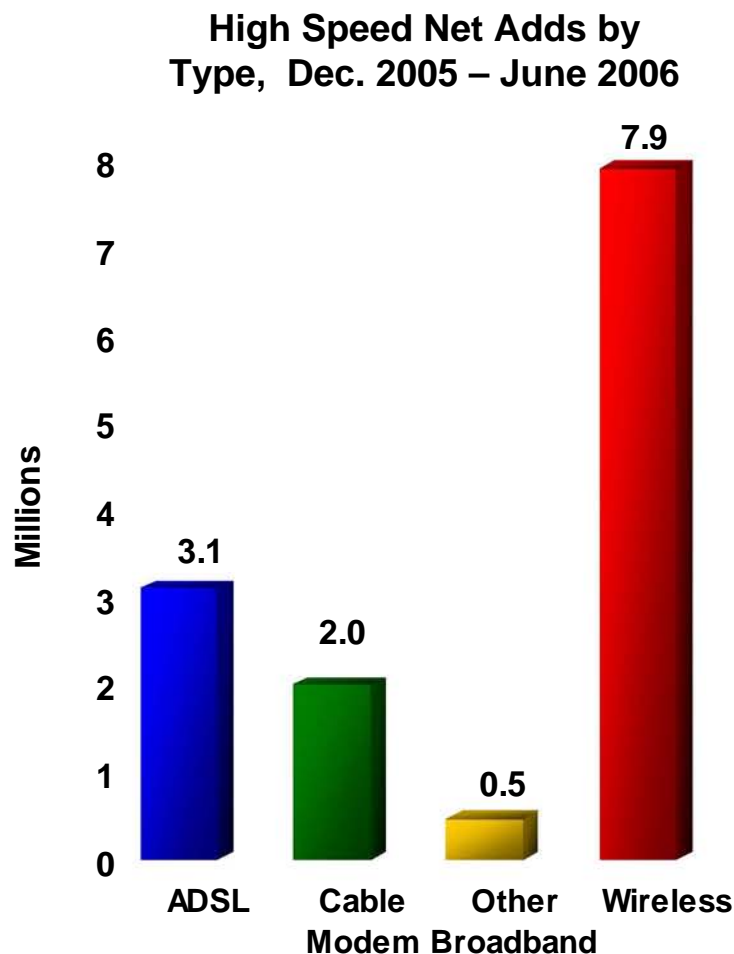
- Wireless broadband delivers the unique benefit of mobility to its users.
 - Wireless isn't a third pipe into the *home*, it's a third pipe *to the person*, wherever they are when they want access to information.
- In some areas, mobile wireless broadband is the only broadband choice available.
 - Rural and high-cost areas can benefit from the availability of broadband speed mobile wireless technologies.
- Wireless gives broadband users the choice to subscribe to monthly data plans or forgo subscription and pay based upon their actual use.

Wireless Carriers are Responding to Diverse Consumer Demand

- The competitive wireless industry has a proven track record of responding to consumer demand – without regulatory intervention. Mobile broadband is a case in point:
 - Aircards: Consumers plug aircards into their computers to access the Internet over the CMRS network. Increasingly, the aircard capabilities are being integrated into laptops and other mobile computing devices.
 - Personal Digital Assistants: Consumers with a variety of handheld PDAs can access the Internet, including pages not specifically designed for handsets.
 - Handsets: Handsets offer Internet browsing on the increasing number of sites that have tailored their websites to work with the smaller screen size of mobile handsets.
 - Tethered Devices: Some handsets can be used over a USB or Bluetooth interface to provide a computer with a connection to the CMRS network for Internet access.
 - Wi-Fi Routers: Consumers are creating mobile wireless Wi-Fi hotspots for a variety of applications (e.g., city buses, construction sites, remote security monitoring).
 - Public Safety: The public safety community is increasingly using commercially-available mobile wireless services (e.g., mobile broadband in police cruisers).

High-Speed Line Growth

- In 1H06, total high-speed lines grew 26%, from 51.2 million to 64.6 million lines, and 59% of all adds were mobile wireless subscriptions.
- From June 2005 to June 2006:
 - ADSL's share of total broadband lines fell from 38% to 35%,
 - Cable modem's share fell from 56% to 44%.
 - Mobile wireless' share of total broadband lines rose from 1% to 17% of total broadband lines.
 - The share of "other" forms of broadband (including fixed wireless, satellite, fiber, and broadband over power line) remained at 4% of total broadband lines – although their total line count grew 39%.



Sources: FCC Report on "High-Speed Services for Internet Access," Jan. 2007.

The Competitive Wireless Market Responds to Consumer Demand

- If consumers want a product or device, carriers will offer it.
- Carriers offer differentiated services and products in order to win new customers and retain existing customers.
- Consumers ultimately decide which products, services and devices survive in the competitive wireless marketplace.
- Skype?

***Carterfone* (Open Device Access) Obligations**

- The conditions that gave rise to the *Carterfone* obligations in the 1968 wireline world are not present in the 2007 wireless world.
 - Wireless is not a monopoly. Consumers have competitive choices both in the carrier market and in the handset market.
 - Following the AWS auction, there are three new nationwide licensees (Leap Wireless, MetroPCS and SpectrumCo.).
 - Computer manufacturer Apple recently entered the wireless handset market.
 - Wireless carriers are not in the handset manufacturing business.
 - There is no market failure for regulation to remedy.
- Unlike the wireline world, spectrum is a shared and finite resource which must be managed to maintain quality of service for all users.
 - Handsets are an integral part of the network, both for ensuring efficient use of network resources and for fulfilling important public policy goals (E-911 location accuracy, Telecommunications Devices for the Deaf, etc.).
 - One non-compliant device on a wireless network can impact the user, fellow users on the same network, and users on competing networks in the same or adjacent spectrum bands (e.g., repeaters).
 - The *Carterfone* decision exempted wireline party lines, which are analogous to wireless in terms of being a shared resource.

Open Application Access Obligations

- Carriers currently manage applications on their networks to ensure efficient use of spectrum.
 - Unchecked, applications such as peer-to-peer software and streaming media have the potential to be “bandwidth hogs,” using a disproportionate amount of a base station’s capacity, and degrading service quality for all other users in their vicinity.
- Open access obligations prevent carriers from ensuring the security of customer information.
 - Open application environments for all mobile handsets present security problems as wireless handsets are increasingly acting as mobile computers.
 - “Malware” and mobile viruses have thus far been managed through carrier practices like application approval.
- Consumers are ill-suited to determine the effect their software’s use has on other users and the network at-large.

Bundling Service Plans and Devices

Benefits Consumers

- Consumers have the option of service plans with and without discounted handsets.
- Non-discriminatory bundling of consumer handsets with wireless service has lowered the up-front cost of wireless service, making mobile communications a reality for the majority of Americans.
- Carriers can more efficiently upgrade networks to provide new, faster, and more innovative services by offering compliant handsets through carrier subsidies.
- The Commission has previously ruled on the practice of handset bundling, and its analysis of the benefits to consumers is as apt today as it was in 1992.
 - Lower upfront costs to consumers and more efficient roll-out of new technologies outweighs any potential negative concerns.